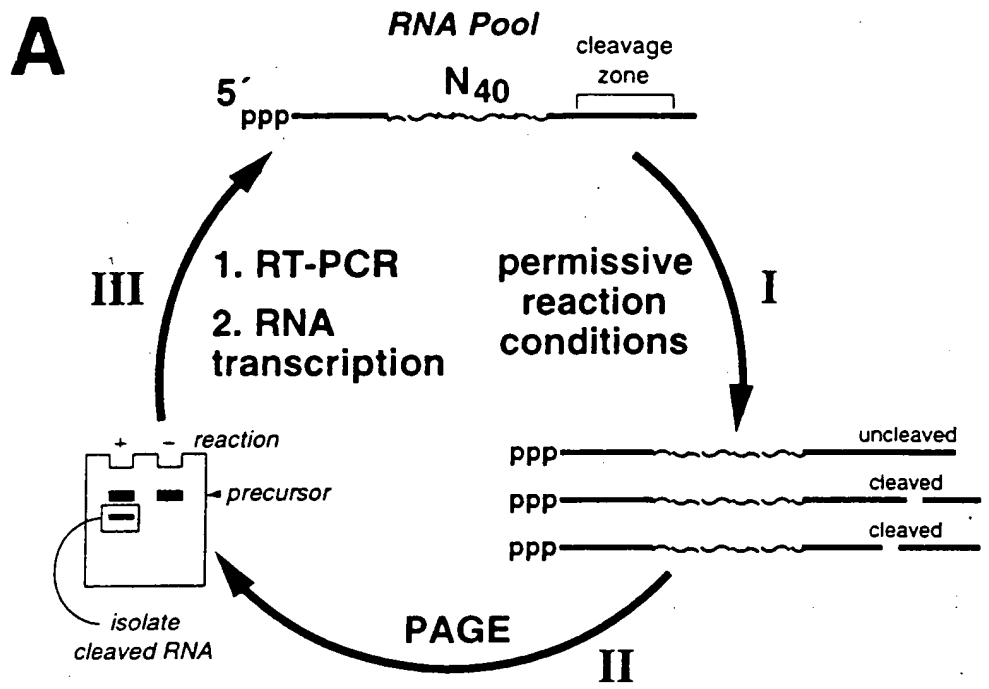
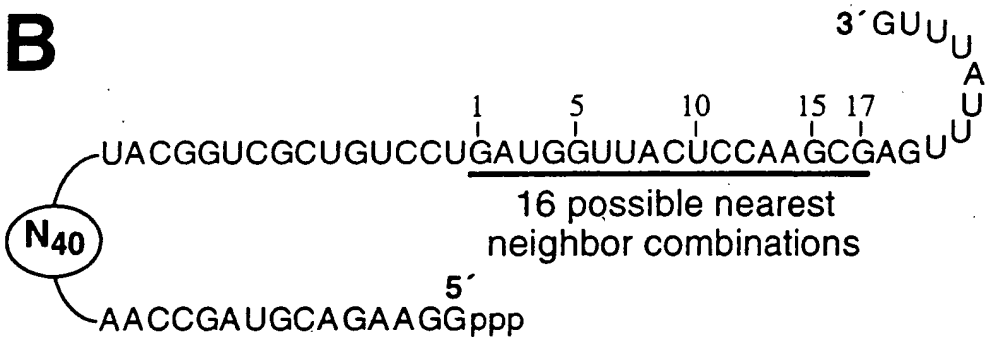
#4

Figure 1





(SEQ ID NO 58)

Figure 2

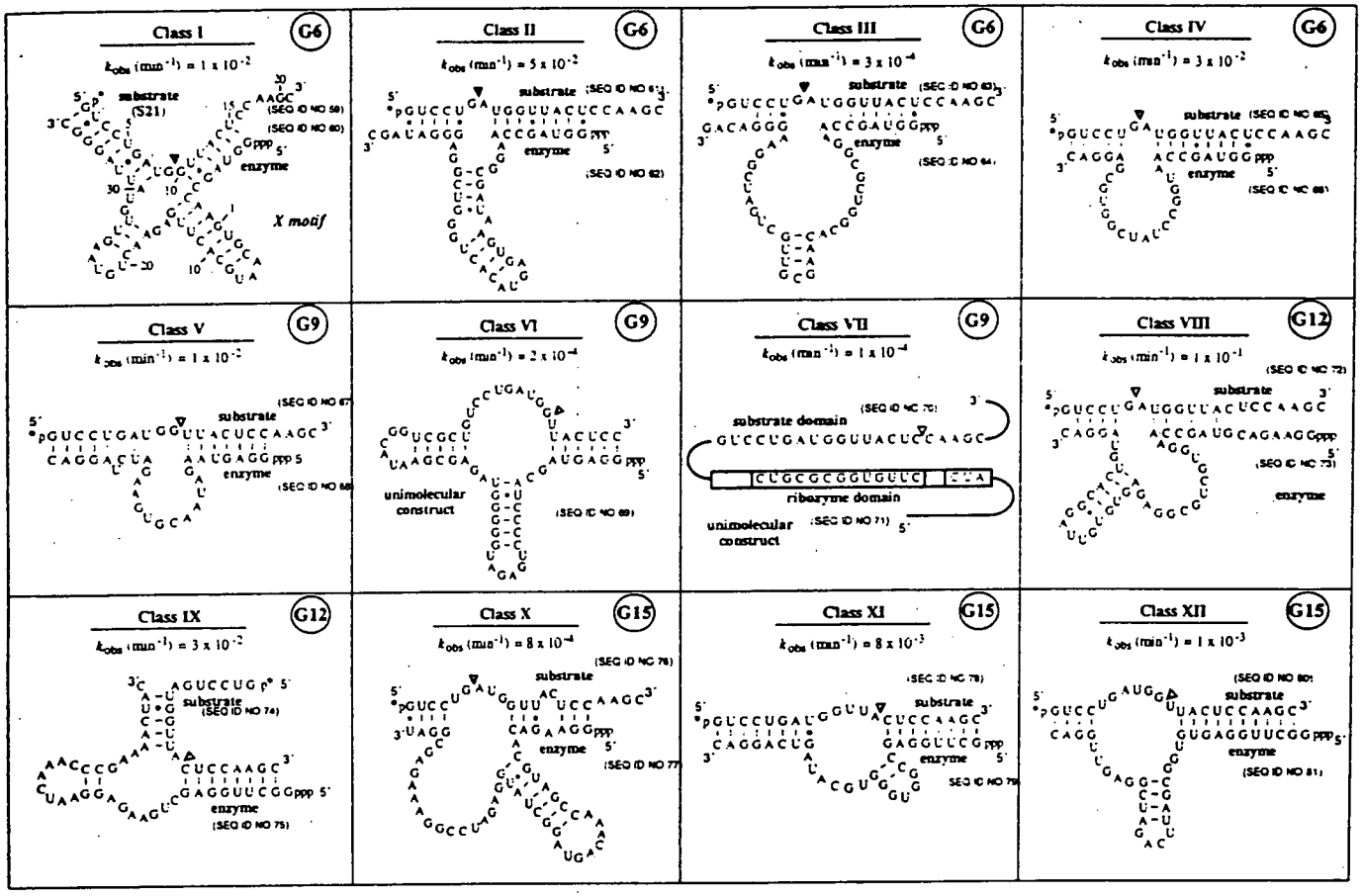
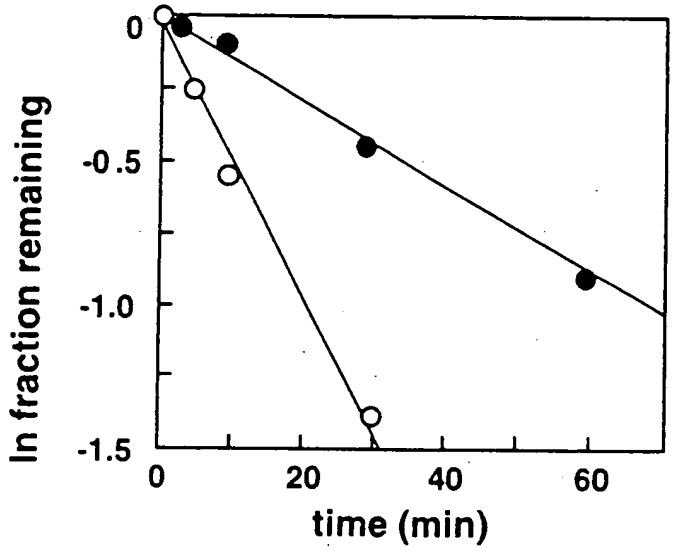
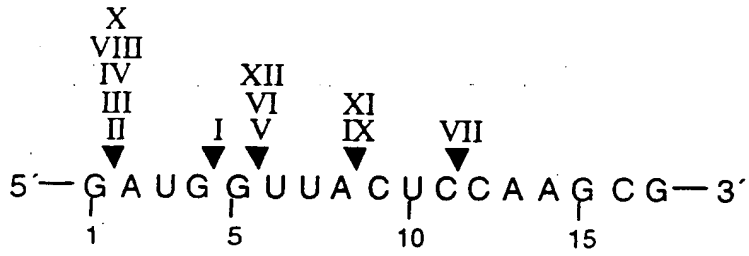


Figure 3

A



B



(SEQ ID NO 82)

Figure 4

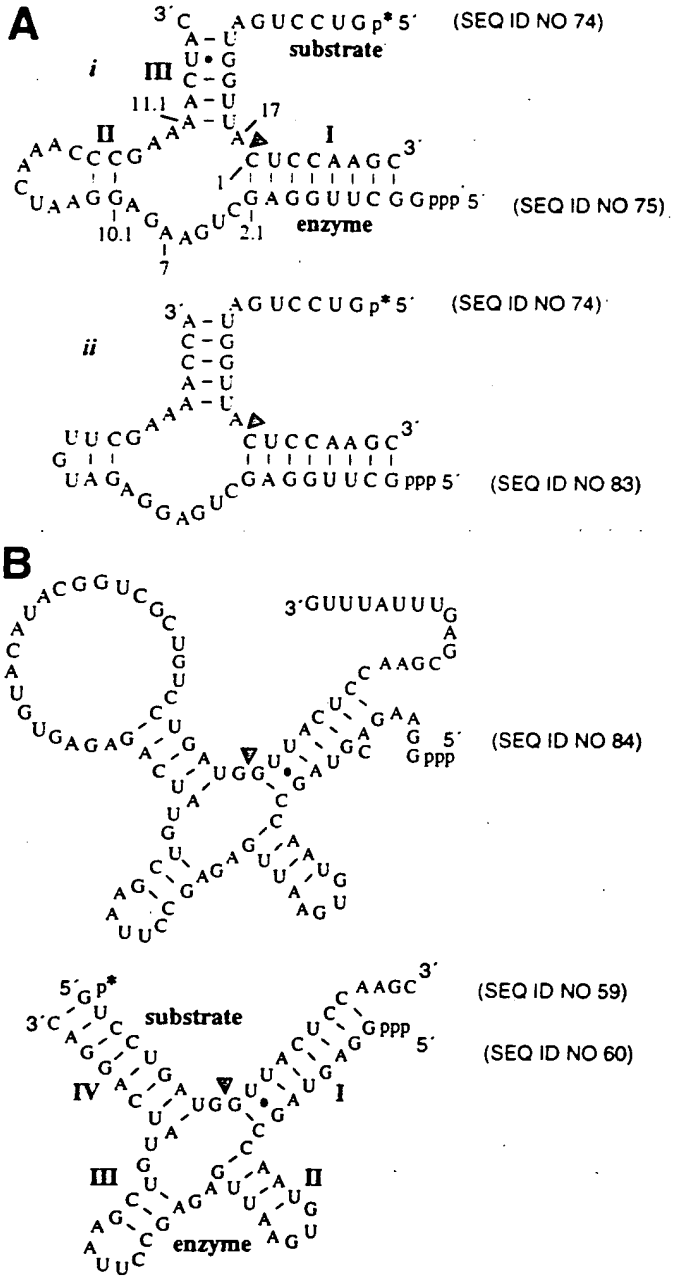

A
substrate
enzyme
(SEQ ID NO 74)
(SEQ ID NO 75)
(SEQ ID NO 74)
(SEQ ID NO 83)
B
(SEQ ID NO 84)
(SEQ ID NO 59)
(SEQ ID NO 60)

Figure 5

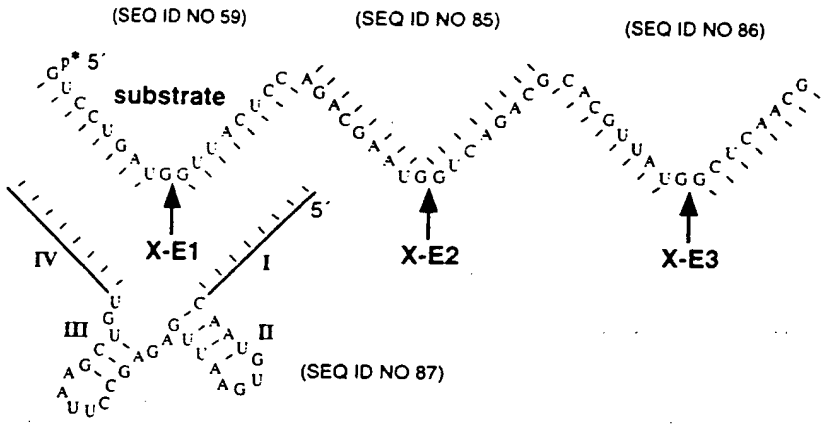

(SEQ ID NO 59)
(SEQ ID NO 85)
(SEQ ID NO 86)
substrate
X-E1
X-E2
X-E3
IV
I
III
II
5'
(SEQ ID NO 87)

Figure 6: Class V ribozyme 2'-O-methyl core "walk"

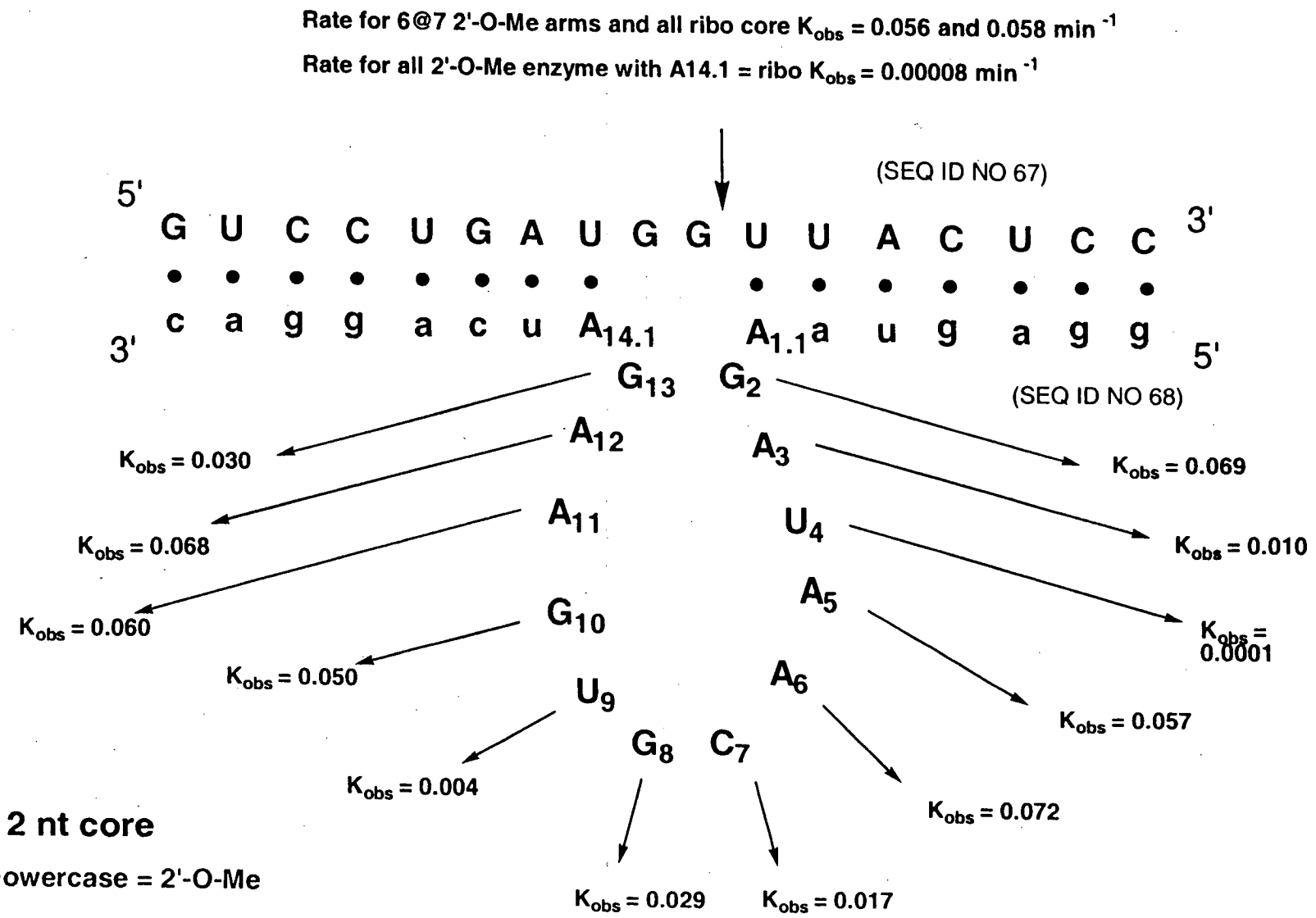
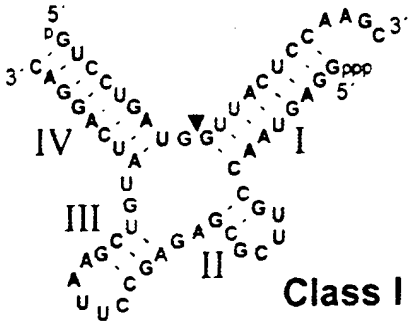
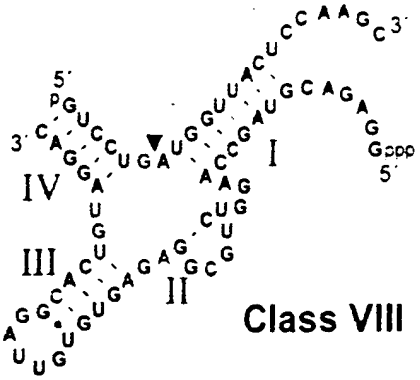


Figure 7: Class I and VIII Sequence and Structural Similarities

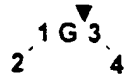


Class I



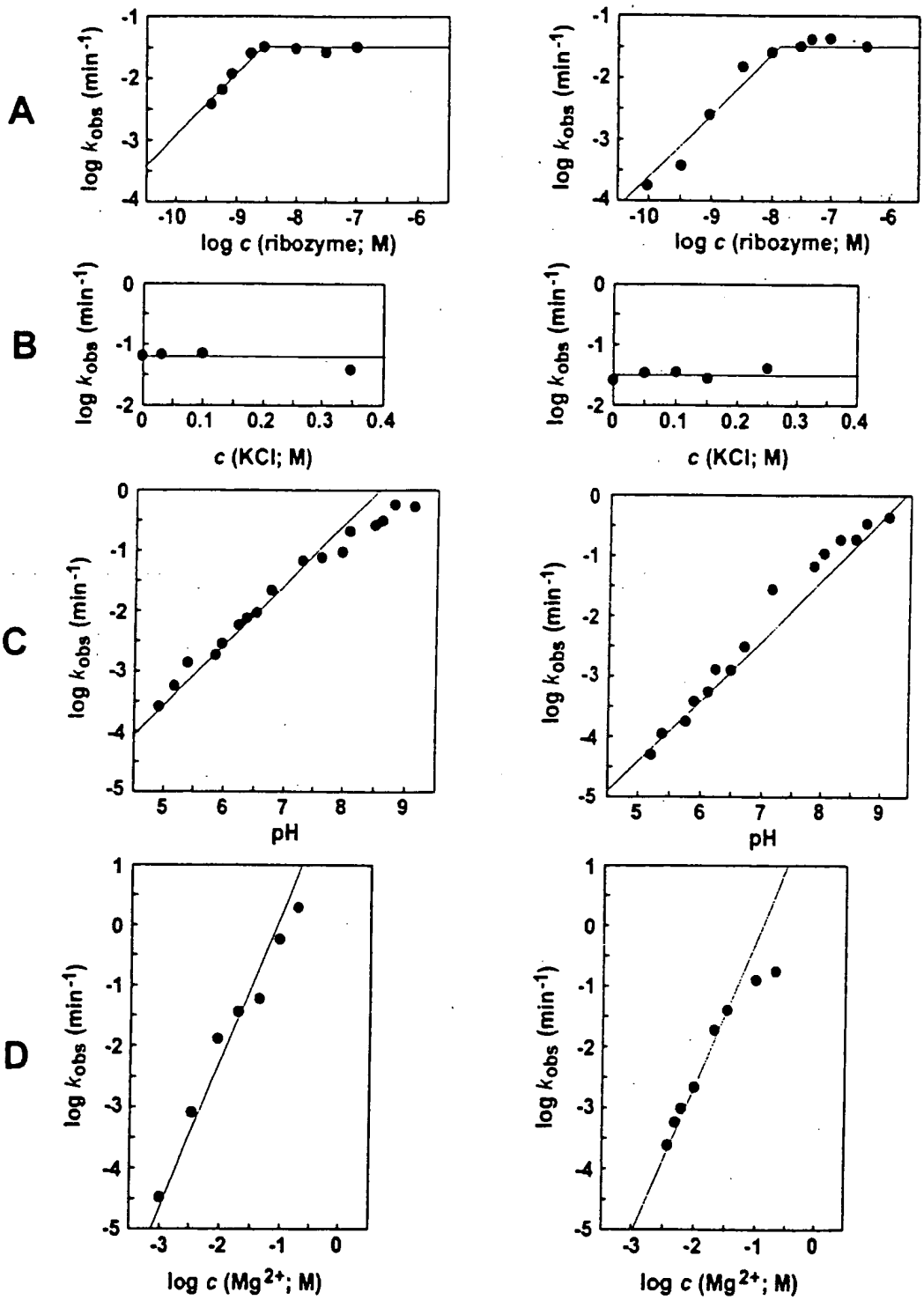
Class VIII

Class I motif cleavage site



1 = A or U
2 = complementary to 1
3 = G, A or U
4 = complementary to 3

Figure 8:


Class I
Class VIII
A
B
C
D
log k_{obs} (min^{-1})
log c (ribozyme; M)
c (KCl; M)
pH
log c (Mg^{2+}; M)